In the Claims:

Cancel claims 1-7.

Add new claim 8-22 as follows:

8.   (new)   A power saving control method for use on a
computer system, comprising the steps of:

checking, when there is no executable user task and
therefore a CPU has entered an idle state, if any timer-
expiration-waiting event is present in an event queue, which
manages event-waiting tasks;

switching the computer system from a normal operation mode
to a first power saving mode when there is any timer-expiration-
waiting event in the event queue; and

switching the computer system from the normal operation mode
to a second power saving operation mode when there is no timer-
expiration-waiting event in the event queue, said second power
saving operation mode differing in power saving effect from the
first power saving operation mode.

9.   (new)   A power saving control method according to claim
8, further comprising the step of:

returning the computer system from the first or the second
power saving operation mode to the normal operation mode
according to a predetermined return condition.

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10.   (new)   A power saving control method for use on a
computer system, comprising the steps of:

checking, when there is no executable user task and
therefore a CPU has entered an idle state, if any timer-
expiration-waiting event is present in an event queue, which
manages event-waiting tasks;

switching the computer system to a first power saving
operation mode when there is any timer-expiration-waiting event
in the event queue, said first power saving operation mode
stopping a CPU operation clock while allowing a timer interrupt
to be accepted;

switching the computer system to a second power saving
operation mode when there is no timer-expiration-waiting event in
the event queue, said second power saving operation mode
inhibiting the timer interrupt while stopping the CPU operation
clock;

saving the time of a hardware timer when entering the second
power saving operation mode;

returning the computer system from the first or the second
power saving operation mode to a normal operation mode in
response to an occurrence of an interrupt; and

detecting the time of the hardware timer when the computer
system returns from the second power saving operation mode to the
normal operation mode, calculating an elapsed time from the saved

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time, and correcting a timer value of a software timer based on the elapsed time.

11.   (new)   A computer system comprising a CPU having a real-time operating system, wherein

said real-time operating system comprises:

an execution queue that manages a queue of execution waiting tasks;

an event queue that manages event waiting tasks; and

a power saving transition check module that checks if there is any timer-expiration-waiting event in the event queue when there is no executable user task in the execution queue and therefore a CPU has entered an idle state and, depending upon whether or not there is any timer-expiration-waiting event in the event queue, switches the computer system from a normal operation mode to a first power saving operation mode or to a second power saving operation mode that has a power saving effect different from that of the first power saving operation mode.

12.   (new)   A computer system according to claim 11 further comprising a power saving mode release module that returns the computer system from the first or the second power saving operation mode to the normal operation mode according to a predetermined return condition.

13.   (new)   The computer system according to claim 12,

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wherein, when there is no executable user task and therefore the CPU has entered the idle state, said power saving transition check module switches the computer system to the first power saving operation mode when there is any timer-expiration-waiting event in the event queue, said first power saving operation mode stopping a CPU operation clock while allowing a timer interrupt to be accepted,

switches the computer system to the second power saving operation mode when there is no timer-expiration-waiting event in the event queue, said second power saving operation mode inhibiting the timer interrupt while stopping the CPU operation clock and, at the same time saves the time of a hardware timer, and

wherein said power saving mode release module returns the computer system from the first or the second power saving operation mode to the normal operation mode in response to an occurrence of an interrupt, detects the time of the hardware timer, calculates an elapsed time from the saved time, and corrects a timer value of a software timer based on the elapsed time.

14.   (new)   A recording medium storing therein a computer program which is readable by a computer system, said computer program executing the steps of:

checking, when there is no executable user task and therefore a CPU has entered an idle state, if any timer-

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expiration-waiting event is present in an event queue, which

manages event-waiting tasks;

switching from a normal operation mode to a first power

saving mode when there is any timer-expiration-waiting event in

the event queue; and

switching from the normal operation mode to a second power

saving operation mode when there is no timer-expiration-waiting

event in the event queue, said second power saving operation mode

differing in power saving effect from the first power saving

operation mode.

15.   (new)   A recording medium according to claim 14,

further comprising the step of returning from the first or the

second power saving operation mode to the normal operation mode

in response to an occurrence of an interrupt.

16.   (new)   A recording medium storing therein a computer

readable program executing the steps of:

checking, when there is no executable user task and

therefore a CPU has entered an idle state, if any timer-

expiration-waiting event is present in an event queue, which

manages event-waiting tasks;

switching the computer system to a first power saving

operation mode when there is any timer-expiration-waiting event

in the event queue , said first power saving operation mode

stopping a CPU operation clock while allowing a timer interrupt to be accepted;

switching the computer system to a second power saving operation mode when there is no timer-expiration-waiting event in the event queue, said second power saving operation mode inhibiting the timer interrupt while stopping the CPU operation clock;

saving the time of a hardware timer when entering the second power saving operation mode;

returning a computer system from the first or the second power saving operation mode to a normal operation mode in response to an occurrence of an interrupt; and

detecting the time of the hardware timer, when the computer system returns from the second power saving operation mode to the normal operation mode, calculate an elapsed time from the saved time, and correct a timer value of a software timer based on the elapsed time.

17. (new) A microprocessor having a function of a real-time operating system, wherein

said real-time operating system comprises:

an execution queue that manages a queue of execution waiting tasks;

an event queue that manages event waiting tasks; and

a power saving transition check module that checks, when there is no executable user task in the execution queue and

therefore a CPU has entered an idle state, if there is any timer-expiration-waiting event in the event queue and, depending upon whether or not there is any timer-expiration-waiting event in the event queue, switches the microprocessor from a normal operation mode to a first power saving operation mode or to a second power saving operation mode that has a power saving effect different from that of the first power saving operation mode.

18. (new) A microprocessor according to claim 17 further comprising a power saving mode release module that returns the computer system from the first or the second power saving operation mode to the normal operation mode according to a predetermined return condition.

19. (new) A microprocessor according to claim 18, wherein when there is no executable user task and therefore the CPU has entered the idle state, said power saving transition check module switches the computer system to the first power saving operation mode when there is any timer-expiration-waiting event in the event queue , said first power saving operation mode stopping a CPU operation clock while allowing a timer interrupt to be accepted,

switches the computer system to the second power saving operation mode when there is no timer-expiration-waiting event in the event queue, said second power saving operation mode inhibiting the timer interrupt while stopping the CPU operation

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clock and, at the same time saves the time of a hardware timer,
and

wherein said power saving mode release module returns the
computer system from the first or the second power saving
operation mode to the normal operation mode in response to an
occurrence of an interrupt, detects the time of the hardware
timer, calculates an elapsed time from the saved time, and
corrects a timer value of a software timer based on the elapsed
time.

20.   (new) A computer program executing the steps of:

checking, when there is no executable user task in a
computer system and therefore a CPU has entered an idle state, if
any timer-expiration-waiting event is present in an event queue,
which manages event-waiting tasks;

switching from a normal operation mode to a first power
saving mode when the computer system enters a first operation
state when there is any timer-expiration-waiting event in the
event queue; and

switching from the normal operation mode to a second power
saving operation mode when the computer system enters a second
operation state when there is no timer-expiration-waiting event
in the event queue, said second power saving operation mode
differing in power saving effect from the first power saving
operation mode.

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21.   (new)   A computer program according to claim 20,
further comprising the step of returning the computer system from
the first or the second power saving operation mode to the normal
operation mode in response to an occurrence of an interrupt.

22.   (new) A computer program executing the steps of:

checking, when there is no executable user task and
therefore a CPU has entered an idle state, if any timer-
expiration-waiting event is present in an event queue, which
manages event-waiting tasks;

switching the computer system to a first power saving
operation mode when there is any timer-expiration-waiting event
in the event queue , said first power saving operation mode
stopping a CPU operation clock while allowing a timer interrupt
to be accepted;

switching the computer system to a second power saving
operation mode when there is no timer-expiration-waiting event in
the event queue, said second power saving operation mode
inhibiting the timer interrupt while stopping the CPU operation
clock;

saving the time of a hardware timer when entering the second
power saving operation mode;

returning the computer system from the first or the second
power saving operation mode to a normal operation mode in
response to an occurrence of an interrupt; and

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detecting the time of the hardware timer, when the computer

system returns from the second power saving operation mode to the

normal operation mode, calculate an elapsed time from the saved

time, and correct a timer value of a software timer based on the

elapsed time.